Having thus described the preferred embodiments, the invention is now claimed to be:

1. A magnetic resonance apparatus comprising:

a magnet assembly for generating a main magnetic field through a subject disposed in an examination region, the magnet being disposed in a magnetic resonance suite;

a sequence control system for generating magnetic resonance sequences;

an RF coil which at least receives resonance signals from the examination region, the RF coil being disposed adjacent the examination region;

an image processing system which processes the resonance signals received by the RF coil into images and manipulates the reconstructed images;

a wireless interface disposed with an antennae in the magnetic resonance suite for wireless communication between (i) at least one of the sequence control systems and the image processing system and (ii) at least one of the RF coil and a wireless remote control unit for communicating between an operator and at least one of the sequence control system and the image processing system.

2. The magnetic resonance apparatus as set forth in claim 1, wherein the remote control unit includes:

a display for relaying information from at lest one of the sequence control system and the image processing system to the operator;

an input portion for accepting requests from the operator;

an RF transmitter for transmitting the operator requests to the wireless interface.

3. The magnetic resonance apparatus as set forth in claim 2, wherein the remote control unit further includes:

a radio frequency receiver for receiving radio frequency signals from at least the wireless interface.

4. The magnetic resonance apparatus as set forth in claim 3, further including:

a microprocessor for processing operator input to the remote control unit.

5. The magnetic resonance apparatus as set forth in claim 1, wherein the wireless interface and the at least one of the remote control unit and the RF coil communicate with carrier frequencies greater than 500 MHZ.

6. The magnetic resonance apparatus as set forth in claim 5, wherein the carrier frequencies are between 2.3 and 2.6 GHz.

7. The magnetic resonance apparatus as set forth in claim 1, further including:

an RF transmitter disposed adjacent the RF coil;

a radio frequency transceiver connected with the transmitter for communicating between the RF transmitter and the wireless interface.

8. The magnetic resonance apparatus as set forth in claim 1, further including:

additional radio frequency transceivers for providing a wireless communication pathway between a radio frequency transmitter and the RF coil.

9. A method of magnetic resonance comprising:

inducing a main magnetic field through a subject in an imaging region;

exciting and manipulating magnetic dipoles within the imaging region;

receiving and demodulating magnetic resonance signals;

reconstructing the demodulated resonance signals into an image representation of the patient in the imaging region; and

wirelessly communicating at least one of exciting and manipulating instructions, received resonance signals, and image processing instructions with radio frequency signals.

10. The method as set forth in claim 9 further including:

identifying an RF coil with which the magnetic resonance signals are received using a radio frequency communicated handshaking protocol.

11. The method as set forth in claim 9, wherein the radio frequencies are greater than 500 MHZ.

12. The method as set forth in claim 9, further including:

wirelessly communicating and displaying information pertinent to a current magnetic resonance scan on a remote unit.

13. The method as set forth in claim 12, further including:

receiving reconstructed image information with the remote unit;

displaying the received image information on the remote unit.

14. The method as set forth in claim 9 further including:

wirelessly communicating an identification of an RF receiving coil which is mounted adjacent the imaging region to receive resonance signals emanating from the subject.

15. A hand-held remote interface unit for use in conjunction with a diagnostic imaging apparatus comprising:

a communicating means for communicating information to an operator;

a receiving means that receives the information to be displayed;

an input means that facilitates operator communication to sequence control and image processing systems;

a display means that displays the information communicated to the operator.

16. The remote interface unit as set forth in claim 15, wherein the input means includes at least one of:

a keyboard;

a touch screen; and,

a voice recognition device.

17. In a magnetic resonance imaging system which includes a shielded imaging suite, a magnet which generates a primary magnetic field through an imaging region located in the imaging suite, RF and gradient coils disposed adjacent the imaging region in the imaging suite, a sequence control system, and an image processing system, the improvement comprising:

communicating within the magnetic resonance suite over radio frequency communications signals.

18. In the magnetic resonance imaging system as set forth in claim 17, wherein the radio frequency communicating includes:

communicating radio frequency resonance signals received by the RF coil over the radio frequency communications signals to the image processing system.

19. In the magnetic resonance imaging system as set forth in claim 17, wherein the radio frequency communicating includes:

communicating control signals from a hand held controller in the imaging suite to at least one of the sequence control system and the image processing system.

20. In the magnetic resonance imaging system as set forth in claim 17 wherein the communications are digitally encoded on the radio frequency communication signals.

21. In the magnetic resonance imaging system as set forth in claim 17 wherein the radio frequency communication signals have a frequency greater than 0.5 GHz.